An economic report: How state park visitors impact Prince William Sound/Resurrection Bay communities

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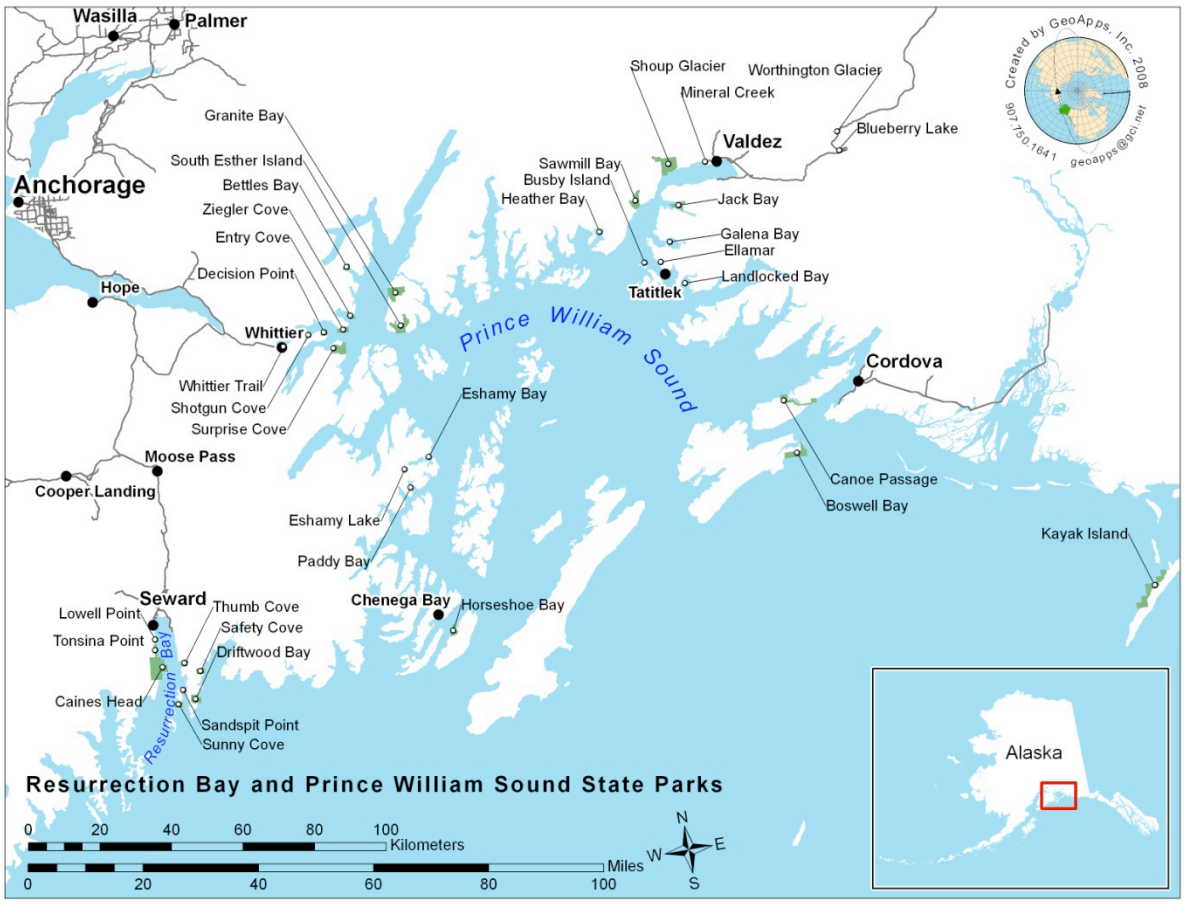
Background and Objectives

In 1970, Alaska state officials created the Division of Parks and Outdoor Recreation to manage the new state park system. Now spanning some 3.3 million acres, the Alaska State Park system is by far the largest in the United States. In comparison, second-ranked California has 1.46 million acres (Landrum, 2004).

Alaska's 140 state parks include roadside stops, camp and historic sites surrounded by some of the world's most magnificent landscapes. In fact, some of the land in Denali, Kachemak Bay and Wood-Tikchik state parks was incorporated into the national park system.

In 1983, the first marine park opened near Juneau as part of an international system extending from Washington through British Columbia to Alaska. This system provides boat owners and water enthusiasts access to coastal environments with protected anchorages. The marine park system expanded in 1990 to include seven parks in the Prince William Sound and Resurrection Bay (PWS/RB) area. Today, 35 Alaska State Parks and Recreational sites make up the PWS/RB area (Alaska Division of Parks and Outdoor Recreation, 1995).



To determine the effects on and benefits to local economies of Alaska State Parks in Prince William Sound/Resurrection Bay, state agencies and land-grant university officials studied the feasibility to upgrade or develop new amenities, such as campsites or access, to attract more visitors.

Next, Cooperative Extension Service designed a survey for PWS/RB visitors to discover trip attributes, visitor demographics and expenditure patterns in Seward, Valdez, Whittier and Cordova. Park managers would then better understand what draws tourists to the region, what needs to be protected or enhanced and how to create geographically or demographically based marketing programs to increase tourist visits and spending.

Methods

Visitors responded to 11 expenditure classifications based on location of expenditure – at home, en route or within 20 miles of the park. To cover the greatest ground with the least expense between June through September 2006, the survey was administered in three different ways:

- To Alaska State Park public-use cabins, community visitor bureaus, Forest Service stations and the Alaska State Ferry M/V Aurora by the Division of Parks and Outdoor Recreation office in Soldotna.
- To clients of 10 businesses with operating permits within the PWS/RB area.
- On the Department of Natural Resources website.

Of the initial 1,460 surveys, 737 returned unused. Of the remaining 723 surveys distributed to visitors, 118 or 16 percent came back. Eight more website surveys boosted the total to 126 useable surveys.

Correcting IMPLAN Data

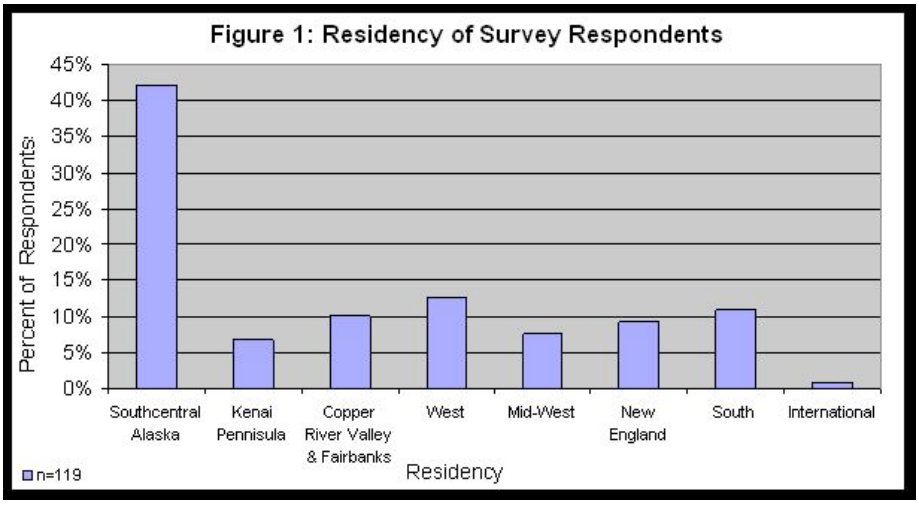
The expenditure data served to estimate the regional economic impacts using the Impact Analysis for Planning (IMPLAN) input-output software program. IMPLAN is an effective tool to illustrate the relative size and distribution of economic activity throughout a region. But the program requires "ground-truthing" to increase accuracy in a specific location, particularly for an atypical locale (Holland et al., 1997).

The IMPLAN sector employment reflects 2004 Rural Economic Information System (REIS) data for the Kenai Peninsula Borough and Valdez-Cordova Census Areas. The ES202 data supplements the REIS data and adjusts the IMPLAN model for those sectors in which there were disclosure issues with REIS data (Forestry, Fishing, Mining, Professional and Technical Services).

Results

Out of the 14 survey questions, five involved demographic information, while the remaining nine pertained to trip attributes.

In Figure 1, most respondents (42 percent) hail from Southcentral Alaska, followed by the western United States. Home locations include:



- Southcentral Alaska – Anchorage, Chugiak, Eagle River,

Girdwood Palmer and Wasilla.

- Kenai Peninsula – Anchor Point, Homer, Kenai, Seward, Soldotna and Sterling.
- Copper River and Fairbanks – Copper Center, Fairbanks, Fox, Glennallen, North Pole and Valdez.
- Western U.S. – California, Colorado, Idaho, Nevada, Utah and Washington.
- Midwest U.S. – Illinois, Indiana, Michigan, Missouri, Ohio and Wisconsin.
- New England – Connecticut, Maine, Massachusetts, New York, New Jersey and Pennsylvania.
- Southern U.S. – Florida, North Carolina, South Carolina, Tennessee, Texas and Virginia.
- International – Germany.

Table 1 shows the average regional state park visits as 3.5 days. The median (three visits) and mean (13 visits) varies substantially, implying that some people, likely locals, frequent the region. The average age is 46 and the average household income is $102,000. Most visits average 4.42 people.

Table 1: Descriptive Statistics for Visitors to PWS/RB Alaska State Parks

	Mean	Median	95% CL	Sample Size
Group size (people)	4.42	3	0.78	117
Trip length (days)	3.54	3	0.27	121
Visits (trips)	13.29	3	4.11	113
Age (years)	46.34	48	2.26	117
Household income	$101,956	$100,000	$10,386	115

Figure 2 lists visits to the 35 state recreation sites. Parks excluded due to lack of responses are Boswell Bay, Driftwood Bay, Eshamy Lake, Eshamy Bay, Granite Bay, Heather Bay, Kayak Island, Paddy Bay, Safety Cove, Sawmill Cove, Shotgun Cove and South Ester Island.

Of all the parks visited, Shoup Bay landed the highest number of respondents (28 percent). Worthington Glacier had the second highest (24 percent) with Caines Head next (22 percent).

Worthington Glacier – on the Richardson Highway close to Valdez – is a popular tour-bus stop. Both Shoup Bay and Caines Head feature cabins – accessed by 11- and 5-mile hikes, respectively – that were consistently booked at 215 and 285 nights throughout 2006, which explains the high number of survey responses from those locales.

Thumb Cove (14 percent) and Decision Point (6 percent) also feature cabins, but they can only be accessed by boat or floatplane.

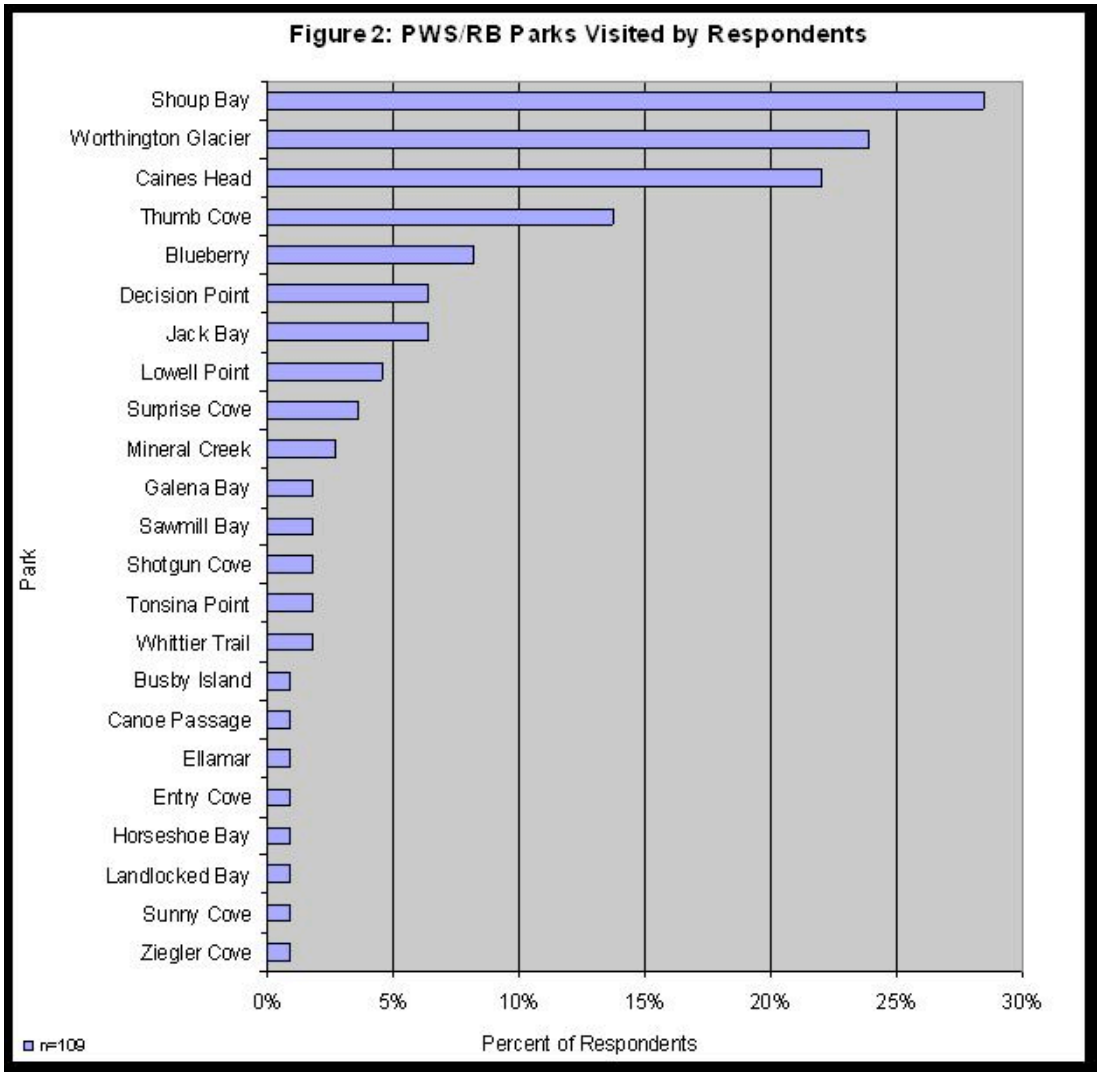
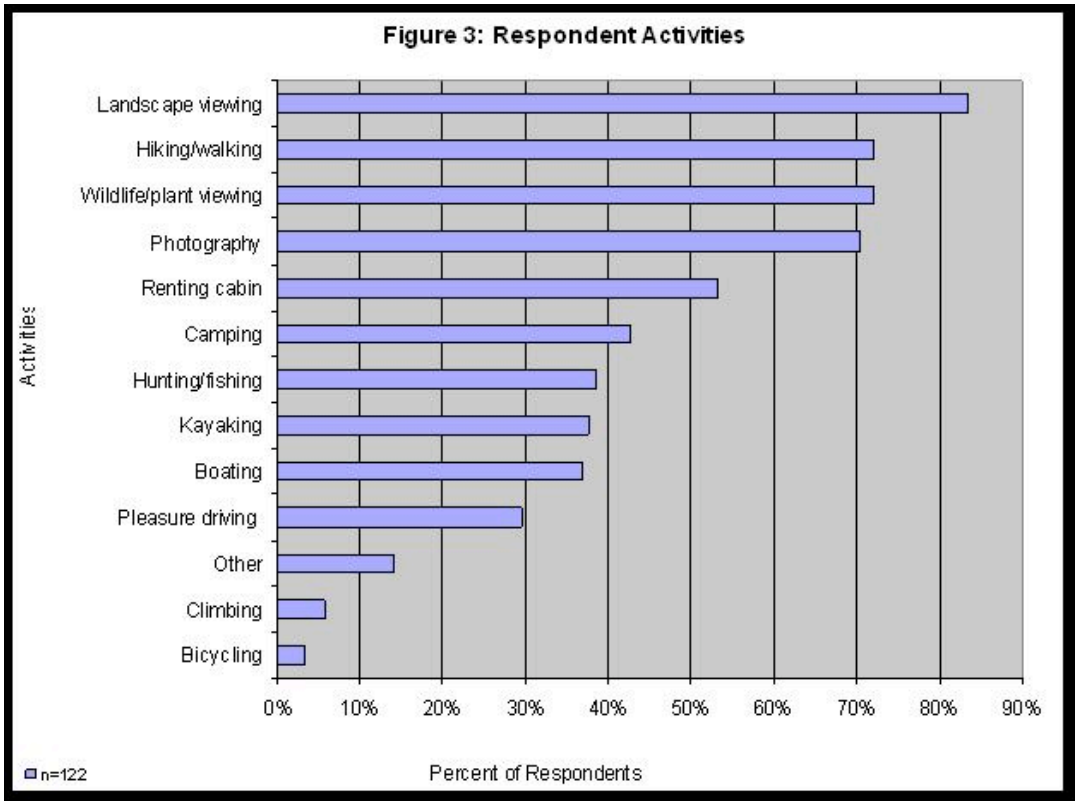


Figure 2: PWS/RB Parks Visited by Respondents
Shoup Bay
Worthington Glacier
Caines Head
Thumb Cove
Blueberry
Decision Point
Jack Bay
Lowell Point
Surprise Cove
Mineral Creek
Galena Bay
Sawmill Bay
Shotgun Cove
Tonsina Point
Whittier Trail
Busby Island
Canoe Passage
Ellamar
Entry Cove
Horseshoe Bay
Landlocked Bay
Sunny Cove
Ziegler Cove
Park
0%
5%
10%
15%
20%
25%
30%
n=109
Percent of Respondents



Based on a list of 13 activities, Figure 3 reveals PWS/RB visitors' preferences. The "Other" category includes skiing, berry picking, prospecting, shell collecting, visiting a WWII fort, birding, shopping and pet outings.

Activities such as rented cabins, photography, hiking, wildlife/plant/ landscape viewing and walking accounted for 50 percent to 72 percent of responses.

Visitor Economic Impacts

In 2006, visitors chalked up 81,948 days in PWS/RB state parks (Alaska State Parks, pers. comm.). They also spent $12.2 million, but only $4.3 million within 20 miles of the parks affected the regional economy (Table 2).

The $12.2 million is relatively low compared to other state parks systems. Visitors to Michigan state parks in 1998, for instance, spent $456.4 million (Stynes, 1998), and visitors to Arizona state parks spent $126 million in 2002 (AHRRC, 2002). Keep in mind that these totals represent entire state park systems, as opposed to a subset of Alaska's state parks.

Michigan and Arizona also boast 7.29 million and 2.51 million visitors, respectively, with little access problems. In comparison, only four of the 35 PWS/RB state parks – Worthington Glacier,

Blueberry Lake, Mineral Creek and Lowell Point have road access, while the other 31 state parks require hiking, boat or floatplane. Clearly, access affects PWS/RB visitation figures relative to state parks in the Lower 48.

Another detail to consider, PWS/RB tourists spend an average of $149.25 per visitor/day at home, en route and within 20 miles of the park (Table 2). Of this total, $51.94 occurs within 20 miles of the park, which is higher than estimates for Missouri state parks, which average $29.67-$37.09 per day, locally (Cole et al., 2002).

Table 2: PWS/RB State Park Visitor Expenditures

Sectors	At Home	En Route	20 Miles from Park
Boat scenic and sightseeing transport	$57,498	$206,144	$1,191,503
Hotels and motels	$35,291	$408,357	$636,049
Food service and drinking places	$93,817	$519,962	$495,597
Gas stations	$401,679	$1,598,152	$475,519
Other amusement (guides)	$17,947	$130,614	$433,695
Food and beverage stores	$590,867	$331,115	$290,155
Air transportation	$756,648	$800,694	$256,421
Sporting goods	$1,699,449	$72,008	$216,012
Parks (cabin and commerical fees)*			$110,830
Parks (licenses)	$73,011	$66,406	$95,696
Misc. stores (souvenirs)	$4,703	$109,974	$54,651
Total	**$3,730,911**	**$4,243,425**	**$4,256,129**
Per visitor/day	**$45.53**	**$51.78**	**$51.94**
*actual data reported rather than survey results			

Also, average spending within 50 miles of each Arizona State Park is $50.28 per visitor/day (AHRRC 2002), which parallels PWS/RB parks. Stynes (1998) found that on average Michigan state park visitors spent $61.44 per day while at home, en route and within 20 miles of the state park. Of this amount, $30.33 is spent within 20 miles of the state park.

The $4.3 million influx to the regional economy creates more spending by regional businesses and households. In other words, park visitor dollars ripple throughout the local economy:

Table 3: Regional Impact of Visitor Expenditures

	Direct	Indirect	Induced	Total
Employment impact (jobs)	67.1	6.5	29.5	103.1
Output impact (dollars)	$4,256,129	$711,557	$2,416,843	$7,384,529

In total, the $4.3 million in direct regional state park visitor expenditures support an additional $3.1 million in sales within the PWS/RB regional economy for an economic impact of $7.4 million and additional 103 jobs annually.

Conclusion

Visitors spent $12.2 million to enjoy PWS/RB state parks in 2006. Of this amount, $4.3 million directly affected Cordova, Seward, Valdez and Whittier with $3.1 million in additional spending for a true increase of $7.4 million in economic output and 103 local jobs.

Visitors spend $149.25 per visitor/day, of which $51.94 directly benefits the regional economy. Most expenditures ($1.2 million) involve the Scenic Boat and Sightseeing sector followed by the Hotels and Motels sector ($636,000) and the Food Service and Drinking Places sector ($496,000).

The overall direct, indirect and induced economic effects boost the $51.94 to $90.11 per visitor/day. That fact alone creates a strong case for new development. Findings suggest that access and park visitation are indeed related, since four parks with cabins, the two with trail access have a much higher occupancy rates. If trails providing good access to cabins could be developed, the costs of doing so could be quickly recouped in the form of economic benefits to the regional economy. For example, each visitor contributes $90.11 to the economy per visitor/day and the average group size is 4.42 people, the total value per group/day is $398.29. That means 251 nights of cabin rentals would cover the $100,000 to construct new trails, if benefits to the regional economy were the deciding factor.

On the other hand, nearly 95 percent of visitors do not stay in park cabins. The Cordova, Seward, Whittier and Valdez chambers of commerce could alter that number by taking a more proactive approach in marketing their communities in relation to nearby state parks. Although these communities have websites, they could entice more photographers, bird watching groups or kayakers to their region, particularly from southcentral Alaska and major regional hubs in the western United States.

In the final analysis, PWS/RB state parks contribute to local economies, but better marketing and new development would significantly increase visitors and further line the wallets of local economies.

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